

IN THE SPECIFICATION

Please amend the Specification by replacing the paragraph beginning at page 16, line 16, through line 24, with the following replacement paragraph:

Typically the helmet shell is 1/16 inch to 1/4 inch thick. It is composed of a polymeric material such as polycarbonate. A net or mesh of reinforcement fibers comprised of KEVLARKevlar® or SPECTRASpectra® in a polymeric matrix are bonded to the helmet shell at its inner and outer surfaces. KEVLAR is a registered trademark of DuPont and SPECTRA is a registered trademark of Honeywell International. As is known in the art, KEVLAR fibers are composed of a para-aramid, while SPECTRA fibers are composed of high density, extended chain, high modulus polyethylene. The fibers have a length typically greater than 1 inch. Long reinforcement fibers may be woven into a net or mesh while shorter fibers may be assembled to form a non-woven mesh. The mesh may be permanently bonded to the inner and outer surface of the shell during the injection molding step by lining the cavity appropriately with the net or mesh, or by layering the net or mesh with appropriate polymer mixture over a pre-molded helmet shell.

Please amend the Specification by replacing the paragraph beginning at page 22, line 22, through page 23, line 14, with the following replacement paragraph:

Referring to Figs. 1A-1B, there is shown generally at 10 a schematic arrangement of the lightweight impact resistant football helmet system. Depicted by Fig. 1A are-is a front view and by Fig. 1B a cross section taken along the line XX. The arrows in the front view indicate the direction of view. The molded shell of the helmet is shown at 11. A mesh or net of reinforcing high strength fibers composed of Kevlar® or Spectra® is shown at 12. Such high-strength fiber mesh or net is disposed on each of the inner and outer surfaces of the shell. The thickness of the helmet shell 11 is typically smaller than a conventional helmet, due to the strengthening properties afforded by reinforcing fibers placed and bonded permanently on the helmet's exterior and interior surfaces. Within the reinforced helmet 11 there is provided a second inner pliable padded helmet 13, which is in close contact with the wearer's head and the inner surface of the helmet shell 11. The helmet is secured to the wearer's head by an attachment means. In the embodiment depicted by Fig. 1A, the attachment means comprises a strap 20 of conventional design (shown in broken view). During impact, the helmet shell 11 undergoes bending deformation. Bending is not severe; but rather exhibits a moderate to low curvature, causing shell 11 to contact a relatively large area of the inner pliable padded helmet 13. Loads resulting from impacts against the top and sides of shell 11 are distributed, reducing stresses and providing increased shock absorption. In addition, the lighter weight of the fiber reinforced helmet shell 11 limits the amount of applied force delivered by the helmet wearer against other football players during blocking or tackling events.